CLAIMS

1. An implantable delivery system comprising, in combination: a cytotoxic agent; a high molecular weight hyaluronic acid conjugated with the cytotoxic agent to create a conjugation which is hydrophilic; and a bioresorbable delivery vehicle for the conjugation, with the bioresorbable delivery vehicle and the conjugation as a cargo being implantable to a wound under repair.

2. The implantable delivery system of claim 1 further comprising, in combination: high molecular weight hyaluronic acid blended with the conjugation.

3. The implantable delivery system of claim 2 with the high molecular weight hyaluronic acid blended with the conjugation by a mass ratio in the order of 1:1.

4. The implantable delivery system of claim 2 further comprising, in combination: another cytotoxic agent, with the other cytotoxic agent being a passive cargo residing in the delivery vehicle for sequential delivery to the wound after the cytotoxic agent of the conjugation.

5. The implantable delivery system of claim 4 wherein the bioresorbable delivery vehicle has a gross size, shape, architecture and mechanical characteristics to dictate a final three-dimensional morphology of repair tissue for the wound.

6. The implantable delivery system of claim 5 wherein the bioresorbable delivery vehicle is formed of a bioresorbable material selected from a group of alphahydroxyl acids.

7. The implantable delivery system of claim 6 wherein the bioresorbable delivery device is fabricated in the form of a porous sponge having randomly sized, randomly shaped and infinitely intercommunicating interstices.

8. The implantable delivery system of claim 7 with the molecular weight of the high molecular weight hyaluronic acid being in the range of 40-60 kilodaltons.

9. The implantable delivery system of claim 8 with the cytotoxic agent of the conjugation being paclitaxel.

10. The implantable delivery system of claim 9 with the other cytotoxic agent being cisplatin.

11. An implantable delivery system comprising, in combination: a first cytotoxic agent; a second cytotoxic agent different from but complimentary to the first cytotoxic agent; a first bioresorbable delivery vehicle which is hydrophobic, with the first cytotoxic agent being a cargo in the first bioresorbable vehicle for delivery of the first cytotoxic agent during resorption of the first bioresorbable delivery vehicle, with the first bioresorbable vehicle including void spaces; a second bioresorbable delivery vehicle which is hydrophilic, with the second cytotoxic agent being a cargo in the second bioresorbable vehicle for delivery of the second cytotoxic agent during resorption of the second bioresorbable delivery vehicle, with the second bioresorbable delivery vehicle and the second cytotoxic agent located in the void spaces of the first bioresorbable delivery vehicle.

12. The implantable delivery system of claim 11 with the second cytotoxic agent being chemically bound to the second bioresorbable delivery vehicle.

13. The implantable delivery system of claim 12 with the second bioresorbable delivery vehicle being hyaluroric acid conjugated to the second cytotoxic agent.

14. The implantable delivery system of claim 13 with the hyaluronic acid having a high molecular weight.

15. The implantable delivery system of claim 14 with the high molecular weight of the hyaluronic acid being in the range of 40-60 kilodaltons.

16. The implantable delivery system of claim 15 with the second cytotoxic agent being paclitaxel.

17. The implantable delivery system of claim 16 with the first cytotoxic agent being cisplatin.

18. The implantable delivery system of claim 17 with the void spaces of the first bioresorbable delivery vehicle being defined by an internal architecture of partially enclosed, randomly sized, shaped and positioned intercommunicating instersties dictating a final three-dimensional morphology of repair tissue.

19. The implantable delivery system of claim 18 with the first bioresorbable delivery vehicle being formed of a bioresorbable material selected from a group of alphahydroxy acids.

20. The implantable delivery system of claim 13 further comprising, in combination: high molecular weight hyaluronic acid blended with the conjugation.

21. The implantable delivery system of claim 11 with the first cytotoxic agent adapted to damage a cell's ability to accurately replicate, and with the second cytotoxic agent adapted to paralyze a cell's cyctoskeleton.

22. An implantable delivery system comprising, in combination: cisplatin; paclitaxel; and a bioresorbable delivery device for the paclitaxel and the cisplatin, with the bioresorbable delivery device initially releasing the paclitaxel followed sequentially by releasing of the cisplatin.

23. The implantable delivery system of claim 22 with the bioresorbable delivery device sequentially releasing the paclitaxel and the cisplatin initially at high level concentrations followed by a lower but sustained systematic release.

24. The implantable delivery system of claim 23 with the bioresorbable delivery device including a first bioresorbable delivery vehicle, with the cisplatin being a cargo in the first bioresorbable delivery vehicle, with the first bioresorbable delivery vehicle including void spaces, with the bioresorbable delivery device further including a second bioresorbable delivery vehicle located in the void spaces of the first bioresorbable delivery device, with the paclitaxel being a cargo in the second bioresorbable delivery device.

25. Cancer treatment method comprising:

implanting a bioresorbable delivery system into a wound for releasing first and second cytotoxic agents in a predetermined chronologic sequence with the first cytotoxic agent being released first followed by release of the second cytotoxic agent; and

radiating the wound during release of the second cytotoxic agent and after initial release of the first cytotoxic agent.

26. The cancer treatment method of claim 25 with the first and second cytotoxic agents being each released initially at high local concentrations followed by a lower but sustained systemic release.

27. The cancer treatment method of claim 26 with the first cytotoxic agent adapted to paralyze a cell's cyctoskeleton and with the second cytotoxic agent adapted to damage a cell's ability to accurately replate, with radiating the wound damaging a cell's ability to repair damaged DNA.

28. The cancer treatment method of claim 26 with the first cytotoxic agent being paclitaxel and with the second cytotoxic agent being cisplatin.